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ABSTRACT

This paper argues that existing methods of analyzing school efficiency are not useful in assessing efficiency and that alternative models are needed. Traditional analyses are discussed on the premise that schools function like private firms, where either the classroom or the school is the producing unit and the teacher or the principal is the decision-maker who controls and shapes the teacher-learning process. This premise is found to disregard the key variables of school district administrative organization and its impact on teacher effectiveness. The report finds that school district administrations function primarily by political, not economic or even educational, criteria. A model of school production is proposed that is administrative/politically based and that allows the underlying technology of school production to vary. A methodology for assessing the costs and "effectiveness" of alternative school district administrative organization is developed. Appended are an evaluation chart for comparing centralized and decentralized school district administrative configurations and 17 references. (SI)

ANALYZING SCHOOL DISTRICT CENTRALIZATION: A RESEARCH FRAMEWORK

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December 29, 1988

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ABSTRACT

The paper argues that existing methods of analyzing school efficiency are not useful in assessing efficiency and that alternative models are needed. We propose such a model.

"Traditional" analyses are based on the premise that schools function like private firms, where either the classroom or the school is the producing unit and the teacher or the principal, the decision- maker who controls and shapes the teaching-learning process. This premise assumes away the key variable of school district administrative organization -- the very variable we are interested in -- and its impact on teacher effectiveness.

But beyond that, the premise is fundamentally flawed. Schools and school districts do not function like private firms. They are part of the public sector, subject to different conditions and organizational imperatives. Schools' "workers" (teachers) and "supervisors" (principals) are not like workers and supervisors in the private sector, in that teachers and principals do have some control over the learning (production) process. Neither do teachers and principals act like entrepreneur/decision-makers directing the allocation of resources and choosing production technology. School administrations are bureaucracies, part of a larger public bureaucracy subject to complex political pressures and operating much more according to political than to economic rules.

How school district administrations function -- probably a crucial issue in analyzing how knowledge is delivered and how much is produced -- is therefore primarily determined by political, not economic or even educational, criteria.

This structural difficulty with existing models does, however, suggest potential alternatives. We attempt to develop a model of school "production" which is administrative/politically based and which allows the underlying technology of school production to vary. We then use this administrative model to develop a methodology for assessing the costs and "effectiveness" of alternative school district administrative organization.

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INTRODUCTION

There is an increasing sense that many school districts have top-heavy, expensive central administrations that raise management cost without contributing to better student performance. Centralized administration may indirectly even reduce school effectiveness. Finding a better balance between school-centered and district-centered school administration could therefore yield a high pay-off by reducing the cost of managing a district, or by increasing school effectiveness, or both.

It is not easy to assess whether a district's administrative configuration has the "right," or cost-effective, balance. Almost every district administration -- whether centralized or decentralized -- can make a case that its actual degree of centralization or the percent of budget it spends on administrative personnel is what it takes to make things "work." Proving it right or wrong is methodologically complex. We can compare costs to other administrative configurations, but we do not have much to say about how well each configuration really does "work" -- about how "efficient" district administrations are, for example, in delivering academic skills and other

services to pupils. A district with high-cost, centralized administration could be doing a good job even relative to its high costs. On the other hand, it might be able to cut administrative costs significantly without affecting the quality of education in the district.

In this paper, we argue that existing methods of analyzing school efficiency are not useful in making such an assessment and that alternative models are needed. We propose such a model. "Traditional" analyses are based on the premise that schools function like private firms, where either the classroom or the school is the producing unit and the teacher or the principal, the decision- maker who controls and shapes the teaching-learning process. This premise assumes away the key variable of school district administrative organization -- the very variable we are interested in -- and its impact on teacher effectiveness. But beyond that, the premise is fundamentally flawed. Schools and school districts do not function like private firms. They are part of the public sector, subject to different conditions and organizational imperatives. Schools' "workers" (teachers) and "supervisors" (principals) are not like workers and supervisors in the private sector, in that teachers and principals do have some control over the learning (production) process. But neither do teachers and principals act like entrepreneur/decision-makers directing the allocation of resources and choosing production technology. School administrations are bureaucracies (see, for example, Meyer, Scott, Strang, and Creighton, 1985; Corwin and

Edelfelt, 1978), part of a larger public bureaucracy subject to complex political pressures and operating much more according to political than to economic rules (Offe, 1973). How school district administrations function -- probably a crucial issue in analyzing how knowledge is delivered and how much is produced -- is therefore primarily determined by political, not economic or even educational, criteria.

This structural difficulty with existing models does, however, suggest potential alternatives. We attempt to develop a model of school "production" which is administrative/politically based and which allows the underlying technology of school production to vary. We then use this administrative model to develop a methodology for assessing the costs and "effectiveness" of alternative school district administrative organization.

SCHOOL PRODUCTION

To analyze the impact of administrative centralization or decentralization in school districts, we should be able to turn to the abundant literature on educational production. These studies have attempted to analyze the relationship between educational inputs and educational outcomes. The typical measure of educational outcome has been a standardized reading or mathematics test (although some studies have used other measures, such as student attitudes or test scores that reflect other cognitive domains). The measures of inputs include those related to student characteristics (socio-economic status, race, ethnic group, and sex) and those directly related to schools -- class

size, teacher experience and education, and school facilities (see Brown and Saks, 1975; and Averch et. al., 1974).

If school production equations truly represented the educational process, we should at least get some indication from them whether a school district administration -- given its pupil population -- is organized to maximize school outcomes. The district would choose to invest in those inputs that resulted in the largest contribution to the achievement of pupils with different social class background.

Estimates of such equations -- when interpreted carefully -- have shown that pupil social class characteristics have an important impact on school achievement and the effect of specific teacher characteristics vary in their effect on school performance depending on pupils' social class and race (Averch et. al., 1974; Hanushek, 1986). However, for reasons that are crucial to our methodological task, school production studies fail to provide the basis either for school resource allocation decisions or for judging administrative organization. In Henry Levin's words, "...it is probably fair to say that the investigations have been more successful in demonstrating the inherent complexities of the phenomenon than in producing useful results" (Levin, 1980: 205).

Levin goes on to argue that the principal reason that the body of educational production research has not contributed significantly to our knowledge about how schools work is the lack of an underlying theory of schooling -- neither of a theory

of how inputs relate to outputs, nor of a theory of organizational behavior which forms the basis of understanding how schools are organized for learning and how resource decisions are made (Levin, 1980, p. 206).

For one, although school production models recognize that school performance is a joint product of the school and the family, there is no theoretical basis for specifying the joint-production relationship. Most education production estimates implicitly assume that the decision-making unit which allocates school resources (teacher skills, for example) and chooses teaching technology (curriculum and teaching method) is the teacher (classroom as unit of production) or principal (school as unit of production). Yet, these same estimates then use individual pupils as the unit of observation, implying that the pupil or the family is actually the unit in which learning occurs. Often, this is rationalized by considering data on pupils only as the "capital" or "raw material" that they bring into the classroom or school. Joint production is therefore assumed to take place in a series of stages, first in the family, then -- when the pupil enters school -- in the classroom or school. But this assumption does not reflect an important reality: learning is a complex process that includes "production" in the family, community, and the school, even after the child enters school. Correctly specified school production models would have to define the underlying relationship between the family (where family could be extended to include community) and the school learning

process.

Even assuming that the learning process could be specified, however, education production estimates have generally ignored the issue of school administration, implicitly assuming that school "firms" are administered either or both at the school level (in which school administrators choose and allocate teacher capacity and perhaps time) and at the classroom level, in which case individual teachers themselves are assumed to organize the teaching-learning process, including the allocation of capacity, effort, and time (Levin, 1980, pp. 211-12).

Levin argues that this school "firm" assumption is fundamentally incorrect. The decisions on how to use teachers' time and, to a large extent, the degree of effort, are largely controlled by bureaucratic organizations, not by teachers themselves. "Time allocations to particular subjects tend to be set according to institutional rules," Levin says; "instructional materials are selected according to institutional rules; variations in teaching methods are circumscribed by mandatory confinement of students to orderly classrooms, supervisory evaluations, and organizational sanctions with respect to 'unauthorized' subjects; and so on" (Levin, 1980: 211-12). School administrations are therefore faced with the task of extracting effort from teachers to fulfill educational goals set largely outside the classroom and even the school, using institutionally-set teaching methods. There is even some question as to how much say district administrations have over the

allocation of teacher time or how and what pupils are taught.

All this obviously raises serious questions about the meaning of an educational production equation which assumes that there is any direct relation between teacher abilities and pupil achievement without the intervention of administrative styles. It also raises questions about the degree to which school administrators exercise managerial control over organizational alternatives. Most important, Levin's analysis suggests that our approach to educational production must shift from an "autonomous classroom" basis to one which centers on educational administration and its relation both to teachers (educational workers) and to exogenous factors influencing school production.

The third problem with education production estimates is that they assume that the school or school district "firm" maximizes student performance (usually as measured by test scores), in a fashion analogous to a private enterprise maximizing profits. Indeed, almost all studies of school effectiveness explicitly or implicitly make this assumption. It follows from this assumption that administrative configurations that improve the district's average pupil performance would tend to be preferred by the district's administration, much as, in private firms, management tends to adopt profit-raising reorganizations (or be forced to do so by potential buy-outs).

We contend that there is little evidence that schools or school districts do, in fact, operate to try to <u>increase</u> average student performance or average "value added" (the increase in

pupil performance over the previous year), as a firm would operate to increase average earnings (Cyert and March, 1963). To the contrary, we suggest, schools and school districts are much more likely to use pupils' average performance as a quota to be met, and attempt to maximize other variables, such as teacher and parent satisfaction or state performance criteria, which are much more oriented to bureaucratic accountability than pupil performance (Meyer, Scott, Strang, and Creighton, 1985). In this sense, pupil performance is only one of several intermediate goods, such as financial solvency and peaceful and orderly schools, which enter into a district administration's political "legitimacy. "

THE SCHOOL AS A "PUBLIC SECTOR" ORGANIZATION

If school districts do not operate as private firms, maximizing profit (real value added in the form of increased student performance), what do they do and how do they do it? Educational production models, we suggest, have misspecified schools as organizations as a result of this underlying but fundamentally incorrect view. Once characterized as firms, schools or school districts (or classrooms) have to be specified as producing a clearly defined product, and allocating resources in a way that maximizes output. Further, teachers are defined as workers of differing capabilities whose time and effort can be allocated to various activities by the school or school district manager, or are defined as enterpreneurs who manage their own time and effort in the classroom "firm" and allocate their own

(teacher) capabilities in a way that maximizes student performance.

The school (or classroom) as a private firm-like organization is also incorrectly assumed to produce student academic performance independently of the other principal knowledge-producing organization -- the family -- once the child enters school. This is definitely not the case in practice, as school sociologists have long recognized (see, for example, recent work by Dornbusch et.al. (1987)). But modelling family behavior regarding learning and the joint, family-school production of school-based knowledge is even more difficult than modelling education production in schools.

It could be that these problems could be solved within the framework of the schooling-as-a-firm analysis. But we suggest that schools and classrooms do not operate in the same way as private firms and never have. At one level or another, public schools are part of the state.[1] As state institutions, they do not maximize profit or output in the "market" sense. Their principal output may not even be student performance, although student performance certainly plays a very important role in the school-family-community political relationship.

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[1] The state is defined here as the set of public institutions and political structures that constitute the "political system" or "political apparatuses." Although some may object to making schools into political institutions, it is specifically the political-institutional aspect of schools that we want to emphasize in explaining why and how school district administrations set goals and make decisions. Later in the paper we also use the term "state" to refer to American states, such as California or New York.

Logic dictates, therefore, that we abandon the notion of education production and its underlying characterization of schools as private firms "managed" to produce some well-defined, economically and socially-valued output. In place of that concept, we need to develop an alternative analysis of schools as public organizations.

The school defined as a public institution makes it considerably different from the school as private firm. As a number of analysts (Buchanan and Tullock, 1965); Niskanen, 1973; Offe, 1973; and Tullock, 1979) have argued, the bureaucratic mode of the public sector (the state) operatives differently from the public sector. It is well-equipped for allocative functions but poorly-equipped for productive activities. "The problem is that the application of predetermined rules through a hierarchical structure of "neutral" officials is simply insufficient to absorb the decision load that is implied by productive state activities... the administration of productive state activities requires more than the routinized allocation of state resources like money and justice ... [and this] is beyond the scope and responsibility of a bureaucracy in the strict sense" (Offe, 1973, p. 136).

Offe's argument implies that schools as an institution are much well suited to judge who is capable of meeting particular standards and who is not (in Offe's terms, to present information and then to "allocate" pupils to different levels of performance). But, as a public bureaucracy, it is not organized

to "produce" -- that is, to increase the output of -- academic performance.

It may seem strange that an institution allegedly charged with producing learning would not be particularly suited to fulfill that objective effectively. In part, the kinds of goods that the public sector is asked to produce make it difficult to maximize their output: these goods, such as student "performance," are ill-defined, and the optimal process to produce them is even less well-defined. More important, however, is Offe's argument that public bureaucracies (and often private ones) are inherently politically rather than market driven. Thus, even if there were a clearly defined output for schools to maximize and known methods for doing so, such bureaucracies would orient themselves to politically efficient distribution (under political decision rules) rather than economically efficient production (under economic decision rules).

Critics (see, for example, Coleman, Hoffer, and Kilgore, 1982; Useem, 1986; Murnane, 1985) have raised three major questions about schools' bureaucratic inefficiencies: (a) Public schools cannot be efficient producers of knowledge <u>because</u> they are bureaucratic; therefore, in order to be efficient, schools must be privatized, or, better, marketized, through a voucher system. (b) Public schools are inefficient because lack of monetary and other incentives for teachers and administrators, as well as the lack of discretionary hiring and firing (teacher tenure) attract low-quality personnel into education, and once

there, reward them without regard for productivity differences. Hence neither administrators nor teachers are accountable in terms of the student performance they are supposed to be maximizing. (c) School bureaucracies -- as bureaucracies -- are insensitive to both parents' and communities'demands. Instead, they focus on the well-being of the bureaucracies themselves -- school leadership therefore tends to meet bureaucratic rather than educational goals.

All three of these criticisms (and there are others) are partially correct and point to reforms which technically could lay the groundwork for more effective (in terms of student performance) schools. But these reforms usually fail because the criticisms on which they are based do not recognize that schools are inherently political institutions situated in political space. Although schools may be run by educationally inefficient bureaucracies primarily meeting bureaucratic goals, they do also meet a host of public needs. There is little evidence, for example, that parents would prefer a system where they could select a school for their children, especially if -- in such a system -- schools would also have the right to select the children who would attend.[2] It is possible, for example, that the better privately-run, voucher-subsidized schools would not only

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[2] In 197 , an attempt was made to put a voucher initiative on the California ballot. It failed by a large margin to get the required number of signatures to qualify, largely because of lack of institutional support from any major organization (such as the Catholic Church) that might have had an interest in a voucher plan.

charge more tuition (greater demand would drive up the price far above the voucher allotment), but even at the higher price would be more selective. It is apparently preferable to most parents to risk less efficient, completely public, community schools which are situated directly in the community's political space than to opt for the material politics of so-called market choice -- a politics which, on average, might provide only somewhat higher quality education than under a public system, and which would force parents and children to engage in a decision process fraught with anxiety and a high probablility of feeling like a loser (as in any market).

Incentive plans designed to exact more effort from teachers have faced another reality. Schools are public bureaucracies characterized -- in a political democracy such as the United States -- by a much higher degree of equality and claims to participatory rights than private sector firms governed by capitalist property rules (Carnoy and Levin, 1985; Bowles and Gintis, 1987). Further, because of their particularly crucial role in producing academic achievement (or knowledge or learning), the "workers" in public schools have always been able to maintain a degree of autonomy and have gained unusual employment conditions, such as tenure, that support this autonomy. Thus, school administration cannot make output decisions independent of their teacher-workers. And teachers have consistently refused to be evaluated in terms of the academic achievement of their pupils, in large part because there are many

other variables involved in achievement gains over which the teacher has little or no control.

What this means, simply, is that as public bureaucracies, schools and school districts also function to maximize the self-interest of teachers and administrators, especially if these different parts of the bureaucracy are politically pitted against each other for political control of the schooling process. Loss of control by teachers necessarily forces them, as power sharers in the bureaucracy, to defend themselves against further incursions and to struggle to gain alternative symbols of power -- higher wages, for example.

The third form of educational system criticism recognizes schools' bureaucratic aspects but incorrectly defines the internal decision-making process in schools and school-districts as autonomous from their larger political-economic and historical context. Teachers and administrators do operate bureaucratically in their self-interest, but they cannot do so independently of larger social conflicts nor even of the pressures exerted on them by parents in their local community. As part of the larger state (political system), schools necessarily are situated in the middle of larger socio-political conflicts, in which the purpose, quality, and distribution of education are important issues.

School bureaucracies have generally produced academic performance jointly with families and communities. They have necessarily (from a legal standpoint) relied on these co-producers for cooperation (and each group takes turns blaming the

other for low productivity as well). But the nature of the cooperation is not the same for all groups of parents nor for all communities; nor would we expect that the joint production functions of academic achievement would be the same.

Thus, school bureaucracies can be indifferent and insensitive to community and parent opinion and pressure, but only at the risk of lowering pupils' academic performance, and of generating even greater pressure and calls for drastic change, particularly for the replacement of the actual administrative personnel. Ultimately, this is not in the interest of school administrators themselves. Hence, even in the most bureaucratic-centered models of school administrative behavior, the possibility of client participation or interest does force bureaucracies at least to consider the consequences of ignoring such pressure.

The incompleteness of all these critiques points to the need for alternative frameworks to analyze schools and -- in particular -- to analyze the possible effects of varying administrative configurations governing school operations. It is to the outline of such alternative conceptualizations that we now turn.

TWO ALTERNATIVE MODELS OF SCHOOL DISTRICTS AS PUBLIC FIRMS

As a public institution, the school (or school district) can be modeled in two different ways:

(1) In the first model, the school district is a public enterprise in a "planned," centralized system, in which the goals

(quotas) for the enterprise are set in the state department of education (where in this context the "state" is one of the 50 U.S. states) as part of the plan. The plan itself is the result of political compromises between various groups and of available resources, but at the state rather than at the local level. The local administration's principal task in this model is to meet the prescribed quota and to negotiate the enterprise (school district) quota from year to year as part of the plan-setting process. If we take school districts as analogous to public enterprises and the individual state's department of education as the central educational planning unit, this model implies that a district superintendent spends most of his time fulfilling state and federal requirements in terms of performance standards set for the district's pupil population, curriculum and teacher standards, and financial accountability. An effective, well-run district is one which best meets state and federal requirements.

Although the district could be judged as more effective were it to exceed state pupil performance standards (often, as in California, these are set relative to pupils' social class, racial, or ethnic composition), a district must also meet other local, state, and federal effectiveness criteria, including fulfilling curriculum requirements, financial solvency, providing special programs, and so forth. These limit the district's flexibility in raising pupils' performance. More important, there are few incentives for exceeding quotas. School personnel do not get paid more should performance rise, nor does a school or

school district get more institutional funding with better performance. To the contrary, designation as a low performance school generally means automatic elegibility for additional funds.

In such a centrally-planned model of school administration, school effectiveness is measured by how well superintendents and principals meet quotas and norms -- including financial solvency -- set in the upper strata of the administrative bureaucracy. The degree of administrative centralization chosen by school districts is largely a function of how a superintendent and his staff decide they can best fulfill these quotas. According to one analysis, the number of central office administrators is largely a function of the kinds of funding made available to and used by school districts, with federal funding generating the most additional bureaucracy and local funding second (Meyer, Scott, Strang, and Creighton, 1985). If the central planning model is a correct specification of school district behavior, Meyer et. al.'s analysis suggests that financial "choices" in raising necessary funding for the district are more important in understanding district centralization than state curriculum and other mandated requirements.

School reforms are undertaken at the central-planning level and then passed down to the districts to be implemented as new norms. For example, in the spate of recent state-level reforms that respond to national calls for higher standards and more control over school district curriculum, many states have

increased academic requirements and pushed for more test-controlled curricula. District administrations tend to organize themselves to respond to such changes. New administrative positions are created to deal with new aspects of reforms.

(2) In the second model, a school district is viewed as an autonomous political decision-making unit, financially independent and itself subject to external political pressures and internal bureaucratic demands. If we think of the school district as a "mini-democratic-state," we need to set out a political-economic theory of that "mini-state" in order to understand how school administrative decisions are made. The key elements of such a theory are the following: (a) Schools and school districts have the complex but rather clearly defined mandate of socializing and training pupils both as future workers in the economy and as citizens of the nation (Carnoy and Levin, 1985). (b) The level of school district funding from local, state, and federal sources is -- to some extent -- based on the degree to which schools are viewed as fulfilling that mandate. (c) In practical terms, then, since school administrators have no power base of their own, they must rely on <u>legitimacy</u> from the community in order to reproduce themselves as administrators. This legitimacy is in part derived from their success in achieving performance standards acceptable to the community (usually, as represented by the school board). (d) Since the school district is also a public enterprise with a semi-permanent set of employees -- tenured teachers -- school administrations

also rely on legitimacy from their teacher corps. The school district as "mini-state" is different from a democratically elected government because school administrators are appointed professionals rather than elected officials. But the fact that school boards are elected and school officials must be responsive to school boards does mean that a superintendent or a principal would have a difficult time remaining in a decision- making position without community legitimacy. At the same time, because district and school administrators are not elected and have an important professional constituency, their power is also a function of professional legitimacy -- specifically related to their ability to deliver higher wages, better working conditions, and professional pride and participation to the district's teachers and staff.

Such "political" pressures on the school administration from its teacher-employees and from parents focus on pupil performance "standards" as one of several academic and work-related issues. The administration responds to these pressures in order to gain legitimacy with various constituencies rather than because it seeks to maximize pupil academic achievement itself. School "effectiveness" is a complex set of subjective norms negotiated politically between parents, teachers, and administration.

From the school district administration's point of view, the optimal administrative configuration is one that maximizes their legitimacy with their employees and the various community constituencies, especially pupils' parents and taxpayers,

including businesses, as represented by the school board.[3] It is usually when one or both of these groups stress pupil achievement (and, in the case of a diverse community, when all its elements put similar pressure on the school district) that pupil achievement standards in the district as a whole enter into administrative legitimacy. There is also often a wide variation of parental pressure within districts. When this variation is "clustered" in certain schools (high pressure parents clustered in one or more schools and low pressure parents in other schools), the district administration has the option of setting differential pupil achievement standards for different schools and focussing primarily on meeting the higher standards in the high pressure parent schools. School district goals are therefore themselves subject to variation, and setting goals and developing incentives to meet them become the most important variables in reforming administrative procedures.[4]

School district policy-making in this model can be viewed as the attempt to establish a dynamic equilibrium among the

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[3] The community defined as individual and business taxpayers can bring pressure to bear at both the local and state level. Although the normal channel of pressure is the school board, more recently, local dissatisfaction in many districts has had state-wide repercussions in tax initiatives such as Prop 13 in California and 2.5 in Massachusetts (see Useem, 1986).

[4] In this sense, critiques of education at the national level (for example, Our Nation at Risk or Our Children at Risk) are correct in focussing directly on raising educational standards as a principal precondition to raising pupil performance. However, the key issue of linking increased academic norms (or goals) to the means of achieving such standards for all pupils in a diverse ethic and racial consitutency are not directly addressed in reports such as Our Nation at Risk.

constituent elements of legitimacy. On the one hand, the district must meet community (parents, taxpayers) expectations of average pupil performance and of administrative efficiency, particularly the effective allocation of tax dollars; on the other, it must meet teachers' material expectations and their other criteria of administrative effectiveness, which could include the quality of working conditions, participation in decision-making, as well as community legitimacy to the degree that this improves teachers' working conditions and professional pride.

When we assume that the school district is locally autonomous, a good school administration is one that is effective politically with two major consituencies: the community, as represented by the school board, and the school district employees, primarily teachers. The standard for average pupil performance is subject to political negotiation between the district administration (sometimes each school's administration) and these two groups. The good school district administration could choose to organize schooling (curriculum, teaching methods, the distribution of administrative responsibilities between schools and the district, and the administrative style within schools) in a way that tries to raise average pupil performance. This would probably increase community legitimacy and perhaps legitimacy with teachers. But if the district raises expectations more than it can actually raise performance, the administration's legitimacy may actually decline even though pupil performance rises. Therefore, the safer to follow the alternative of

simultaneous reducing community expectations and maintaining average pupil performance.

Since legitimacy rather than higher pupil performance is the administration's principal goal, good public relations, effective financial management, materially satisfied teachers, and a "tight ship" are generally just as valuable in being judged effective in raising average pupil performance, reducing drop-outs, or increasing the percentage of district graduates who attend and complete four-year college. An effective school administration measured in non-pupil performance terms may, indeed, also result in increasing pupil performance, and most school administration actions are rationalized in pupil performance terms (since that is the overall mandate of schools). But the key point is that pupils' performance is not the variable being maximized by the school district. Rather, the administration's legitimacy is bound up with historically determined district performance norms. It is only when those norms are raised, either by community action or a risk-taking, reformist district administration, that pupil performance is likely to rise.

In this model, we would expect to find various configurations of administrative responsibilty distributions between schools and school districts. The configuration would depend on community and teacher demands and on the legitimacy-gaining strategies of district administrations. Although certain administrative arrangements might be found to improve pupil performance per se, the conditions of community and

teacher relations could hypothetically be such as to produce an arrangement that does not maximize pupil performance but does attain a high level of administrative legitimacy. In this model, the finding that federal and local funding produce more top-heavy administrations (as opposed to greater school autonomy) than state funding has to be analyzed in terms of financial choices that the district makes to be financially strong, to satisfy teachers, and to keep the school board happy. But it may also be true that the amount of variation in school autonomy/bureaucratization explained by funding sources is small compared to other factors that affect legitimacy, hence school autonomy.

It is primarily when legitimacy is breaking down (a legitimacy "crisis") at the district level that we should find district administrations seeking new configurations or arrangements. Such a crisis could be caused by "internal" conflicts (teacher-administration or intra-administraton or intra-school board) or "external" conflict (community-administration or community- teacher, unresolvable by administration). A legitimacy crisis could arise because of falling pupil performance, or rising, unmet parent expectations concerning performance. But the crisis could also emerge because of financial difficulties, teacher demands concerning working conditions, or teacher dissatisfaction with community relations, particularly when these involve racial or ethnic problems. The crisis could also be caused by reforms developed and implemented

from the state, or even at the federal level (mandated racial integration, for example).

Crises are also more likely to arise in those communities which are more heterogeneous and in which the school district tends to respond to some groups more than others. There is a close relationship between more general political movements, such as the Civil Rights movement, which bring into the open latent social and economic demands, and the increased pressure on schools by previously inactive, often minority parents (Carnoy and Levin, 1985). So crises often occur in heterogeneous or low-income districts where school administrators have historically not had to be responsive to parents when political movements activate those communities to place increased demands on the schools. School district administrators and teachers -- locked into bureaucratic political relations that do not include the client community or at least one part of the community -- usually find themselves unable to respond to these new demands. Crisis often turns into collapse, and -- just as often -- does not generate a legitimacy-creating reform (see Levin, 1972, on community control of schools).

Either the centralized planning model (1) or the political autonomy model (2), we suggest, represents the reality of American school districts much better than traditional education production or internal bureaucratic analyses. Most districts and schools are probably increasingly administered as a <u>combination</u> of (1) and (2), especially since the federal government began to

provide programs for disadvantaged groups in the 1960s and as state departments of education have come into the picture more forcefully with recent reforms to raise standards. School district administration configurations have been shown to be highly responsive to federal, state, and local accountability requirements related to funding (Meyer, Scott, Strang, and Creighton). A combination model would make district/school administration a function not only of seeking local legitimacy from community and employees, but also meeting federal and state standards and requirements. Serious conflicts could arise not only between meeting community and teacher needs (which would be the case if the district were entirely autonomous), but between state requirements and community/teacher needs. This would be especially true for those schools and districts where the school clientele is considerably different from those constituencies influencing education policy at the state level.

In a recent column, for example, Albert Shanker argued that state school reform has largely benefitted those students who were already doing well in school, while ignoring or making worse off those who were doing poorly (The New York Times, April 3, 1988, News of the Week in Review section). If this is true, then we would expect increasing legitimacy problems for those district administrations implementing state-mandated reforms but whose average pupil clientele falls into the already-doing-poorly category. Similarly, in school districts where there is wide diversity among primary and within secondary schools in school

clientele, district-centralized administrative apparatuses may have less flexibility dealing with this diversity and probably less overall legitimacy in the community than school-decentralized apparatuses.

RESEARCHING ALTERNATIVE ADMINISTRATIVE CONFIGURATIONS

This alternative model has important implications for studying administrative configurations in school districts.

In typical economic models of school district behavior, it is assumed that managers, whether they be teachers, principals, or even superintendents, are attempting to maximize pupils' school performance. In an alternative form of such models, administrators could be assumed to be maximizing pupil performance per unit of total spending. In that case, they could be assumed to focus on reducing per pupil cost or searching for more efficient means of delivering a given level of pupil attainment.

In our model, both pupil performance and the economic efficiency of delivering pupil attainment are primarily constraint or control variables rather than dependent variables. School administrators are concerned with them mainly as factors which influence administration legitimacy rather than as end goals.

We can express this alternative model as a set of partially simultaneous hypothesized relations in which pupil performance is a function of teacher effort, capacity, and time allocation and student effort, capacity, and time (Levin and Tsang, 1984);

teacher effort and teacher time is a function of teacher satisfaction and, in the case of time, probably also of teacher union policies; teacher satisfaction is a function of teacher control, pupil performance, and a series of other variables, partly related to district decentralization and financial management; financial efficiency is a function of administrator capacity and efficient centralization-decentralization; parent satisfaction is a function of pupil performance, school district reputation, student behavior, efficient district management, and other variables; and, finally, school district administrations' legitimacy -- the "final output" variable in the model -- is a function of teacher satisfaction, parent satisfaction, and fulfillment of externally-imposed state and federal requirements.

The hypothesized relationships are, in ascending order:

(1) Pupil performance (value added) = f (teacher effort, teacher capacity, teaching time; student effort, student capacity, student time);

(2) Teacher effort = g (teacher satisfaction);

(3) Teacher time = g' (teacher satisfaction, teacher union policies);

(4) Teacher satisfaction = g" (teacher sense of professional control and participation, wage rate, classroom size, pupil performance, preparation time, school orderliness, support staff, opportunity for innovation, opportunity for desired staff development);

(5) Financial efficiency = h (administrative capability, efficient centralization/decentralization);

(6) Parent satisfaction = j (pupil performance, pupil behavior, school district reputation, district financial management, degree of administrative conflict);

and

(7) Legitimacy = k (teacher satisfaction, parent and taxpayer satisfaction, meeting state and federal requirements).

We have not written an relation for each of the independent variables as a function of centralization/decentralization, administrative efficiency, or other variables, although it seems likely that many of them are directly or indirectly affected by administrative decisions taken at the district level. We provide a more informal research framework below for dealing with such possible relations. Other variables are somewhat more problematic: to what extent does the district have control over teacher capacity and time allocation? Levin (1980) suggests that time allocation is largely dictated by state mandates, particularly through curriculum requirements. The district's role is largely limited to enforcing such time allocation. Teacher capacity can -- in part -- be seen as a function of factors out of the district's control: teacher training and the quality of teacher supply is a national issue, depending on the image of the teaching profession and national policies concerned with attracting young people into teaching. Teachers' unions and the

tenure system also place significant constraints on district and school administrators in selecting teachers according to quality or selecting them to meet the needs of a particular school's clientele. But teacher capacity can be affected by salaries and working conditions in the district, especially in periods of growth when new teachers are being hired. This would affect the quality of the applicant pool. The quality of teacher selection procedures in the district can also be improved, whatever the applicant pool. Administrators have the greatest leeway, however, in improving pupil performance by increasing the amount and quality of teacher effort.

Figure 1 suggests the administration's possible strategies. A is the point of lowest legitimacy and H, the highest. A tightly centrally-controlled school district, for example, may spend heavily on central administrators (high spending per pupil) and attain potentially low teacher satisfaction, hence low teacher effort and possibly relatively low pupil performance, but be very high on fulfilling state and federal requirements, and also attain high parent satisfaction through uniform curriculum, strict rules and regulations (a high degree of order) and a positive image for the district (good public relations, for example). Other than the high spending per pupil, the district may also be financially well-managed. Such a district would be nearer point E than point H. But a highly centralized district may also produce low parent satisfaction, especially if centralization effectively blocks parents from school decision-

makers by increasing district bureaucracy. If parents perceive low participative access, they could be dissatisfied (Corwin and Edelfelt, 1978). Often, in the name of "professional control," district centralization is used to convince low-income parents to reduce participation -- to distance the school from the parents. On the other hand, a highly decentralized district (where management is in the hands of the teachers themselves) may increase parent satisfaction initially (point H), but runs the danger of being closer to point B or G than point H if achievement expectations are raised and not met. In either of the two cases, there is potential conflict and "delegitimation" as a result of either teachers or parents feeling shortchanged. This would force administrators to take steps (including centralization or decentralization) in order to avoid losing control of the district.

But these are just examples. In fact, we do not know how centralizing administration in the district office or decentralizing it out to the schools really affects the different variables -- these are the data we would look for in an analysis of district-level reform.

Since many of the variables in the model are highly qualitative, such an analysis would have to rely on ordinal measures to evaluate the potential legitimacy trade-offs (advantages and disadvantages) of school district centralization and decentralization. The simplest way to do this is to list the variables and rank (high, low, neutral) each of them under a

centralized or decentralized school district management configuration. This is illustrated in the teacher control variable (IA). Fulfillment of state and federal requirements could be taken directly from school district evaluations by the state and federal governments. Taken together, these rankings would for evaluating how school districts could and do operate politically through centralized and decentralized administration configurations to maintain and raise legitimacy.

Our discussion of pupil performance pointed out the pitfalls of most performance data, particularly in terms of the schools' contribution. Nevertheless, it is possible to control for social class background in each school district and compare measured pupil performance and changes of pupil performance over time. There is no reason why pupil performance should not be one datum in evaluating the relation of centralized/decentralized administrative configurations. But we also want to know the perception of teachers and parents (and administrators) regarding pupil performance. As far as legitimacy is concerned, it is this perception of performance (subjective evaluation) rather than actual performance (objective evaluation) which is key. Usually subjective evaluation is a function of performance relative to parent and teacher expectations and aspirations, as well as the public relations capability of the school district administration.

A second variable that requires special treatment is "financial efficiency." There are several objective measures of a

school district's finances. For example, non-teacher costs per pupil or central administrative spending as a percentage of total school district spending. It is also possible to list the various non-teacher services provided by the school district and gauge whether it is more or less cost-efficient to administer them at the school or school district level. Some examples: school lunches, special education for handicapped students, in-service training, curriculum innovation, and services that do not contribute directly to academic achievement -- music, physical education, art, and counseling.

FIGURE 1

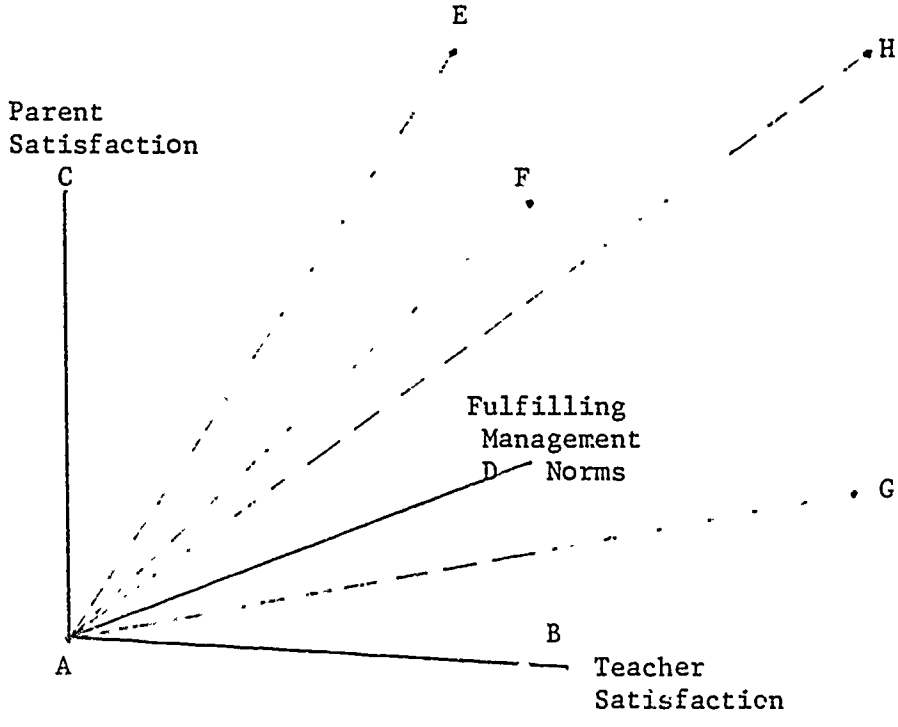
E
H
Parent
Satisfaction
C
F
Fulfilling
Management
D
Norms
G
B
A
Teacher
Satisfaction

Figure 2. Evaluation Chart for Comparing Centralized and Decentralized School District Administrative Configurations

	Centralized	Decentralized
I. Teacher Satisfaction		
A. Teacher sense of professional control and participation	L	H
B. Wage rate/classroom size		
C. Preparation time		
D. School orderliness		
E. Support staff		
F. Opportunity for innovation		
G. Opportunity for desired staff development		
II. Parent Satisfaction		
A. Pupil behavior		
B. School district reputation		
C. District financial management		
D. Degree of administrative conflict		
III. Fulfillment of State and Federal Requirements		

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